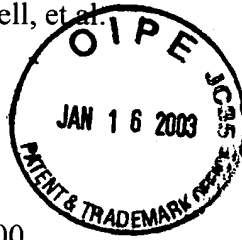


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Todd A. Mitchell, et al. : Date: January 10, 2003
Group Art Unit: 2172 : IBM Corporation
Examiner: T. Nguyen : Intellectual Property Law
Serial No.: 09/488,738 : Dept. 917, Bldg. 006-1
Filed: January 20, 2000 : 3605 Highway 52 North
Title: USER INTERFACE FOR AUTOMATED : Rochester, MN 55901
PROJECT MANAGEMENT



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To: Assistant Commissioner for Patents
Washington, DC 20231

**APPEAL BRIEF IN SUPPORT OF APPEAL
FROM THE PRIMARY EXAMINER TO THE BOARD OF APPEALS**

Applicant herewith submits an appeal brief, in triplicate, in support of the appeal to the Board of Appeals from the decision dated August 20, 2002, of the Primary Examiner finally rejecting claims 1-18.

The appeal brief fee of \$320.00 is to be charged to Deposit Account No. **09-0465**. A duplicate copy of this sheet is enclosed.

Date: January 10, 2003

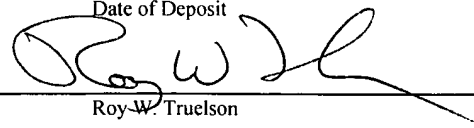
Respectfully submitted,

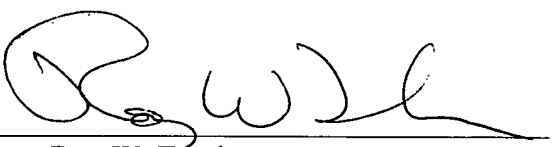
TODD A. MITCHELL, et al.

CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

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Roy W. Truelson

By 
Roy W. Truelson
Registration No. 34,265

Voice/Fax: (507) 289-6256

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Docket No. RO999-164
Serial No. 09/488,738



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Todd A. Mitchell, et al. : Date: January 10, 2003
Group Art Unit: 2172 : IBM Corporation
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Assistant Commissioner for Patents
Washington, D.C. 20231

JAN 22 2003

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**APPEAL BRIEF IN SUPPORT OF APPEAL
FROM THE PRIMARY EXAMINER TO THE BOARD OF APPEALS**

Sir:

This is an appeal of a Final Rejection under 35 U.S.C. §103(a) of claims 1-18 of Application Serial No. 09/488,738, filed January 20, 2000. This brief is submitted pursuant to a Notice of Appeal filed November 15, 2002, as required by 37 C.F.R. §1.192.

1. Real Party in Interest

International Business Machines Corporation of Armonk, NY, is the real party in interest. The inventors assigned their interest as recorded on January 20, 2000, on Reel 010562, Frame 0242.

Docket No. RO999-164
Serial No. 09/488,738

2. Related Appeals and Interferences

There are no related appeals nor interferences pending with this application.

3. Status of Claims

Claims 1-18 are pending and stand finally rejected. The claims on appeal are set forth in Appendix A.

4. Status of Amendments

No amendments were filed following Final Rejection on August 20, 2002.

5. Summary of Invention

The invention herein relates to a user interface for interactive project management software of a type which supports the performance of multiple tasks in furtherance of projects responsive to user selections. In the case of large, complex projects, it is known to have multiple groups or sub-groups of users assigned to the performance of respective sets or subsets of tasks using the project management software (Spec p. 2, lines 17 - p. 3, line 7). In accordance with appellants' invention, each such group is provided its own unique interactive interface to the project management software (Spec. p. 4, lines 2-5). Specifically, a process management function supports the interactive definition of multiple user groups, and further supports the interactive definition of a respective different group interface to the project management software for each group (Spec. p. 4, lines 2-15; p. 11, lines 16-25; p. 16; lines 21- p. 17, line 23; Figs. 12 & 13). Thus, the set of task selections presented to users in a first group is different from (although possibly overlapping) the set of

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task selections presented to users in a second group, even though both groups use the same project management software (Spec. p. 14, line 14 - p. 15, line 1; Figs. 9-11). It is further possible to assign different labels to the same function in the different interactive interfaces of different groups (Spec. p. 4, lines 14-18; p. 15, lines 2-4).

6. Issues

Claims 1-18 are finally rejected under 35 U.S.C. §103(a) as unpatentable over Knudson et al. (U.S. Patent 5,765,140), in view of Gundewar et al. (U.S. Patent 6,381,610). The only issue in this appeal is whether the claims are prima facie obvious in view of *Knudson* and *Gundewar*.

7. Grouping of Claims

Appellants expressly state that, for purposes of appealing the grounds of rejection advanced by the Examiner herein, all claims stand or fall together. However, in the event that new references are cited or new arguments advanced for rejection of the claims, appellants reserve the right to argue that claims do not stand or fall together.

8. Argument

Appellants assert that the Examiner failed to establish adequate grounds of rejection for the following reason:

The mere aggregation of *Knudson* and *Gundewar* does not meet the limitations of appellants' claims without further modification to the proposed combination, and a suggestion to make such a further modification is lacking.

Overview of Invention

A brief overview of appellants' invention in light of existing art will be helpful in appreciating the issues herein. Appellants' invention is in the realm of user interface, and provides a method of customizing a user interface for complex project management software, so that the user interface is optimized for each group of users.

In the realm of user interface, it is often the case that a useful, new and unobvious invention does not provide the user with any new capability to perform some action which could not previously be performed by other means, but instead, provides the user with the capability to perform the action in a manner which is more efficient, more natural, easier to learn, easier to implement and/or in some other respect, better, from the user interface perspective, than prior art techniques. This distinction is a subtle but important one. It may be observed, for example, that the ubiquity of so-called "personal computers" is due in large part to the fact that graphical user interfaces have made use of such systems comfortable to the average person, who lacks skilled training as a typist or computer operator. However, in general such GUI's do not provide the user with any new capability which did not previously exist. Almost all system tasks invoked using a GUI interface can also be invoked using older text-based interfaces.

Applicants' invention addresses a specific area of user interface, namely, the user interface for project management software which is shared by multiple users. Typically, such software accesses a common database and enables its users to perform some set of functions ("tasks") using the database to complete one or more projects. Where large, complex projects are involved, the number of different functions performed by the users can be quite large. It is common in such cases to divide responsibilities for performing the different functions among different users or groups of users. Each group of one or more users is therefore responsible for performing some subset of the full set of functions

available for completing the project, and the subset of functions used by each group is different from that of any other group, although the subsets of different groups may overlap. In a typical such case, there is considerable commonality among the various groups, such as a need to access the common database and perform certain common functions in relation thereto. Other functions may be particular to a single group of users or to some subset of all the groups. Appellants have further observed that different groups performing tasks using a common database sometimes have a different terminology for the same task.

Most conventional project management software provides a standard interface, which may be a single interactive menu or a set of interactive menus. This standard interface may be considered a logical "OR" of the user interface requirements of each separate group of users. I.e., any function required by at least one of the user groups is provided by the standard interface. This means that the users of any given group are presented with all available interactive user function selections in the standard interface. Frequently, many of these selections are not even used by the particular group. The presentation of a large number of function selections unrelated to the responsibilities of a particular group makes the interface overly complex and difficult to use.

It would, of course, be possible to write custom computer programming code providing different interfaces for different groups of users, so that each group is presented only with the functions which are important to it. However, the cost of creating custom programming code discourages this approach. It would alternatively be possible to use different software (and hence different interfaces) for each group, but this approach also has obvious drawbacks.

In accordance with appellants' invention, the project management software includes a custom user interface definition feature, whereby custom user interfaces for different

groups of users may be interactively defined. A custom interface presents a user with only the interactive function selections which are applicable to the user's group, and hence useful to the user; superfluous functions used only by other groups are not presented. The user thus is provided a simplified, easier to understand interactive interface. In the preferred embodiment, the capability to flexibly and easily define different group user interfaces is supported by using interface definition files. These are editable data structures (not executable code) which define customization parameters for use by the interface generator (which is an executable program), so that different interfaces are presented to users from different groups.¹

The capability to generate custom interactive interfaces for different user groups from group-specific interface definitions is a significant feature of appellants' invention.

The mere aggregation of *Knudson* and *Gundewar* does not meet the limitations of appellants' claims without further modification to the proposed combination, and a suggestion to make such a further modification is lacking.

In order to support a rejection for obviousness, there must be some suggestion in the art to combine the references in such a manner as to form each and every element of appellants' claimed invention. It is not sufficient that a suggestion may exist to combine the references, if such a combination does not meet the limitations of appellants' claims without

¹ In the preferred embodiment, the custom interface for the user's group is simply one interface available to the user, and the user still has the capability to access a "standard interface" containing all functions, in the unlikely event that the user needs to access a function normally used by other groups. Thus, appellants' invention is not intended as a security device to prevent access to certain functions, but is an improvement to the interface intended to make the user more productive by showing the user only those function selections which the user is most likely to want.

some further non-obvious modification. Both *Knudson* and *Gundewar* deal with similar subject matter, and appellants do not challenge the combination of the two references per se. But such a hypothetical combination neither meets the critical limitations of appellants' claims nor suggests the modifications necessary to construct these critical elements.

Knudson discloses a "project management system", in which tasks to be performed, schedules, funding and similar information is tracked in a database. *Knudson* discloses that different personnel associated with a project might have different schedules and different tasks to perform, and that this information might be tracked in the database. *Knudson's* database information can be displayed to users, thus showing who is responsible for performing certain tasks and so forth.

Gundewar discloses a project system in which a user is presented with a master interactive interface having multiple procedure selections. In response to the user selecting a procedure, a server downloads a further list of procedure steps for performing the procedure, at least one step including a selectable template identifier. When selected, the corresponding template for data entry is displayed to the client, and the client interactively enters data in the fields of the template.

Taken together, what do these references show? *Knudson* shows only that a database may be used to keep track of project information, including, among a mixture of other data, the fact that different people perform different tasks in a project. *Gundewar* shows a complex interactive user interface involving multiple interactive screens arranged in a hierarchy.

The combination of the two references discloses and suggests nothing more than the use of a complex interactive hierarchical user interface as shown in *Gundewar* for maintaining data of the type disclosed in *Knudson*.

Does such a combination include all the elements of appellants' claims? Manifestly, it does not, for the very essence of appellants' invention, the most crucial part of the claims, is the lacking from such a combination. I.e., the proposed combination simply provides standard complex user interface for maintaining a lot of data about a project, wherein the data may include the fact that different people perform different tasks. But there is no disclosure or suggestion in either reference of using *different user interfaces* for different groups of users.

Appellants' representative claim 1 recites in part:

1. A method for managing a project requiring a plurality of tasks performed on at least one computer system by a plurality of users, comprising the steps of:
 - interactively defining a plurality of groups of users ... ;
 - interactively defining, for each of said plurality of groups of users, a respective project tracking interface, *each project tracking interface having a respective set of task selections, each task selection of a set of task selections corresponding to a respective task action performed by said at least one computer system, wherein a first set of task selections of a first project tracking interface for a first group of users is different from a second set of task selections of a second project tracking interface for a second group of users;*
 - associating a first user with said first group of users;
 - presenting said first project tracking interface ... to said first user;
 - performing task actions ... responsive to said first user interactively selecting the corresponding task selections of said first set of task selections;
 - associating a second user with said second group of users;
 - presenting said second project tracking interface ... to said second user; and
 - performing task actions ... responsive to said second user interactively selecting the corresponding task selections of said second set of task selections.
- [emphasis added]

The remaining independent claims vary in their language, but all recite the essential feature of interactively defining separate and different project tracking interfaces for separate user groups, the interface being an interactive interface from which a user makes selections to perform "task actions" by a computer system.

The Examiner apparently takes the position that the step of interactively defining different project tracking interfaces for different groups of users (italicized above) is in some way obvious in view of *Gundewar*'s interface (which is admittedly the same for all users or groups of users associated with a project) and *Knudson*'s disclosure that different people associated with a project perform different tasks. With all due respect, appellants submit that this is an awfully big stretch of the concept of "suggestion" in the art. If you shuffle and re-shuffle elements, you can come up with almost anything. But in fairness, can it be said that either reference suggests the use of different, customizable interfaces for different groups involved in a project?

Neither cited reference discloses that the user interface is customizable. Neither reference discloses customization of the user interface by interactively editing an interface definition file, which is used to generate the interface. Neither reference discloses that different user groups would benefit from different user interfaces. Neither reference discloses that different interfaces of any type are presented to different groups of users. On the contrary, in the case of both references, the same, fixed interface is presented to each and every user, whoever he may be.

It is too easy to find the elements of an invention in hindsight. Appellants suggest that we step back for a moment and consider the two references themselves. One shows a varied assortment of data for tracking a project, while another shows a complex interactive interface for managing project planning. What does a combination of the two really

suggest? The most immediate, natural combination is a complex interactive interface of the type used in *Gundewar* which maintains data of the type disclosed in *Knudson*. It is true that, buried in this data is the fact that different people perform different tasks on behalf of the project. But is this really a suggestion to customize the interface itself, so that these different people will be presented with different interactive selections?

The fact that different persons or groups of persons involved in a complex project may perform different tasks is well known. The fact that you can track almost any data in a database is known. A variety of interactive interfaces, from the simple to the complex, are known. But the motivation or suggestion to provide a capability to customize the project management interface, so that different groups associated with a project are presented with different interfaces, is not shown in either reference. The suggestion to make this particular modification has come from only one place: appellants' disclosure.

9. Summary

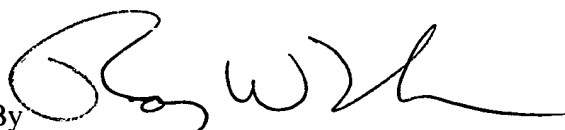
Appellants disclose project management software in which it is possible to interactively customize the user interface presented to different groups of users associated with the project, and to thereafter present the interface optimized for a particular group to users in that group, thereby improving user productivity. The key fact that different user interfaces are interactively defined, and presented to different groups of users, is neither taught nor suggested by either cited reference. A combination of different elements in the references can not show this recited capability without some further modification not suggested in the art. The only suggestion to make the further modification, to provide different user interfaces for different groups of users, comes from appellants' disclosure.

For all the reasons stated herein, the rejection for obviousness was improper, and appellants respectfully request that the Examiner's rejection of the claims be reversed.

Date: January 10, 2003

Respectfully submitted,

TODD A. MITCHELL, et al.

By 

Roy W. Truelson, Attorney
Registration No. 34,265

From:

IBM Corporation
Intellectual Property Law
Dept. 917, Bldg. 006-1
3605 Highway 52 North
Rochester, MN 55901

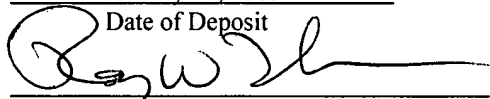
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Roy W. Truelson

**APPENDIX A (CLAIMS)**

1 1. A method for managing a project requiring a plurality of tasks performed on at least
2 one computer system by a plurality of users, comprising the steps of:
3 interactively defining a plurality of groups of users associated with the project;
4 interactively defining, for each of said plurality of groups of users, a respective
5 project tracking interface, each project tracking interface having a respective set of task
6 selections, each task selection of a set of task selections corresponding to a respective task
7 action performed by said at least one computer system, wherein a first set of task selections
8 of a first project tracking interface for a first group of users is different from a second set of
9 task selections of a second project tracking interface for a second group of users;
10 associating a first user with said first group of users;
11 presenting said first project tracking interface having said first set of task selections
12 to said first user;
13 performing task actions corresponding to task selections of said first set of task
14 selections responsive to said first user interactively selecting the corresponding task
15 selections of said first set of task selections;
16 associating a second user with said second group of users;
17 presenting said second project tracking interface having said second set of task
18 selections to said second user; and
19 performing task actions corresponding to task selections of said second set of task
20 selections responsive to said second user interactively selecting the corresponding task
21 selections of said second set of task selections.

1 2. The method of claim 1, wherein said step of interactively defining, for each of said
2 plurality of groups of users, a respective project tracking interface, comprises interactively
3 defining, for each task selection, a respective task description, whereby a task selection for a
4 first project tracking interface may have a first task description, and the same task selection
5 for a second project tracking interface may have a second task description different from
6 said first task description.

1 3. The method of claim 1, wherein each task selection displayed in a project tracking
2 interface includes a task status indicator.

1 4. The method of claim 3, wherein said task status indicator is assumes one of a
2 plurality of colors, each color corresponding to a respective status.

1 5. The method of claim 1, wherein said step of interactively defining, for each of said
2 plurality of groups of users, a respective project tracking interface, comprises generating, for
3 each of said plurality of groups of users, a respective interface definition file, said interface
4 definition files containing entries corresponding to tasks, wherein a first interface definition
5 file for defining said first project tracking interface contains a respective entry for each task
6 selection in said first set of task selections, and a second interface definition file for defining
7 said second project tracking interface contains a respective entry for each task selection in
8 said second set of task selections.

1 6. The method of claim 5, wherein each said entry in an interface definition file
2 includes a respective task description field, whereby a task selection for said first project
3 tracking interface may have a first task description, and the same task selection for said
4 second project tracking interface may have a second task description different from said first
5 task description.

6 7. The method of claim 5, wherein each said entry in an interface definition file
7 includes a respective scope field specifying the scope of the task selection, whereby a task
8 selection for said first project tracking interface may have a first scope, and the same task
9 selection for said second project tracking interface may have a second scope different from
10 said first scope.

1 8. A computer program product for managing a project requiring a plurality of tasks
2 performed on at least one computer system by a plurality of users, said computer program
3 product comprising:

4 a plurality of processor executable instructions recorded on signal-bearing media,
5 wherein said instructions, when executed by at least one processor, cause at least one
6 computer to perform the steps of:

7 receiving interactive input defining a plurality of groups of users associated with the
8 project;

9 receiving interactive input defining, for each of said plurality of groups of users, a
10 respective project tracking interface, each project tracking interface having a respective set
11 of task selections, each task selection of a set of task selections corresponding to a
12 respective task action performed by said at least one computer system, wherein a first set of
13 task selections of a first project tracking interface for a first group of users is different from
14 a second set of task selections of a second project tracking interface for a second group of
15 users;

16 associating a first user with said first group of users;

17 presenting said first project tracking interface having said first set of task selections
18 to said first user;

19 invoking task actions corresponding to task selections of said first set of task
20 selections responsive to receiving interactive input from said first user selecting the
21 corresponding task selections of said first set of task selections;

22 associating a second user with said second group of users;

23 presenting said second project tracking interface having said second set of task
24 selections to said second user; and

25 invoking task actions corresponding to task selections of said second set of task
26 selections responsive to receiving interactive input from said second user selecting the
27 corresponding task selections of said second set of task selections.

28 9. The program product of claim 8, wherein said interactive input defining, for each of
29 said plurality of groups of users, a respective project tracking interface, comprises input
30 defining, for each task selection, a respective task description, whereby a task selection for a
31 first project tracking interface may have a first task description, and the same task selection
32 for a second project tracking interface may have a second task description different from
33 said first task description.

1 10. The program product of claim 8, wherein each task selection displayed in a project
2 tracking interface includes a task status indicator.

1 11. The program product of claim 10, wherein said task status indicator is assumes one
2 of a plurality of colors, each color corresponding to a respective status.

1 12. The program product of claim 8, wherein said step of receiving interactive input
2 defining, for each of said plurality of groups of users, a respective project tracking interface,
3 comprises generating, for each of said plurality of groups of users, a respective interface
4 definition file, said interface definition files containing entries corresponding to tasks,
5 wherein a first interface definition file for defining said first project tracking interface
6 contains a respective entry for each task selection in said first set of task selections, and a
7 second interface definition file for defining said second project tracking interface contains a
8 respective entry for each task selection in said second set of task selections.

1 13. The program product of claim 12, wherein each said entry in an interface definition
2 file includes a respective task description field, whereby a task selection for said first project
3 tracking interface may have a first task description, and the same task selection for said
4 second project tracking interface may have a second task description different from said first
5 task description.

6 14. The program product of claim 13, wherein each said entry in an interface definition
7 file includes a respective scope field specifying the scope of the task selection, whereby a
8 task selection for said first project tracking interface may have a first scope, and the same
9 task selection for said second project tracking interface may have a second scope different
10 from said first scope.

1 15. A computer program product for managing a project requiring a plurality of tasks
2 performed on at least one computer system by a plurality of users, said computer program
3 product comprising a plurality of processor executable instructions recorded on signal-
4 bearing media, said instructions comprising:

5 an interface definition access function, said interface definition access function
6 accessing a project tracking interface definition, said project tracking interface definition
7 being one of a plurality of project tracking interface definitions, each said project tracking
8 interface definition being associated with a respective group of users of said plurality of
9 users, each project tracking interface definition having a respective set of task selections,
10 wherein a first set of task selections of said first project tracking interface definition for a
11 first group of users is different from a second set of task selections of a second project
12 tracking interface definition for a second group of users; and

13 a project tracking interface generator, said generator generating a project tracking
14 interface defined by a project tracking interface definition of said plurality of project
15 tracking interface definitions, said project tracking interface defined by a project tracking
16 interface definition presenting a user with the set of task selections of the project interface
17 definition and allowing the user to invoke task actions corresponding to respective task
18 selections presented to the user by interactively selecting the corresponding respective task
19 selections.

1 16. The computer program product for managing a project of claim 15, further
2 comprising:

3 an interactive interface definition function, said interactive interface definition
4 function interactively receiving and storing a plurality of said project tracking interface
5 definitions, each project tracking interface definition being associated with a respective
6 group of users of said plurality of users.

1 17. The method of claim 1, wherein each said project tracking interface includes a
2 chronological ordering relationship among task selections of its respective set of task
3 selections and at least one indicator indicating a next expected task selection in said
4 chronological ordering relationship among task selections.

1 18. The program product of claim 8, wherein each said project tracking interface
2 includes a chronological ordering relationship among task selections of its respective set of
3 task selections and at least one indicator indicating a next expected task selection in said
4 chronological ordering relationship among task selections.